Amendments to the Claims

1-20. (Cancelled)

21. (Currently amended) A resin coating method of an ~~inert~~ insert member which is a method of applying a resin to an insert member surface by insert molding, the method comprising a surface pretreating step of subjecting the insert member to a silane-coupling treatment after a shot blast treatment; a preheating step of heating the pretreated insert member to a predetermined temperature within a range of from 40°C to a melt injection temperature of the resin and a mold for insert molding to a predetermined temperature within a range of from 40°C to (melt injection temperature of the resin - 50°C); an insert molding step of injecting a molten resin in a state that the preheated insert member is positioned in the preheated mold for insert molding; a holding step of holding a molding in the mold; and a cooling step of taking the insert molding out of the mold, and gradually cooling the same to room temperature.

22. (Currently amended) The resin coating method of an ~~inert~~ insert member as claimed in claim 21, which is a method of applying a resin to an insert member surface by insert molding, the method comprising a surface retreating step of subjecting the insert member to a silane-coupling treatment after a shot blast treatment; a preheating step of heating the pretreated insert member to a predetermined temperature within a range of from 40°C to a melt injection temperature of the resin and a mold for insert molding to a predetermined temperature within a range of from 40°C to (melt injection temperature of the resin - 50°C) and also to a temperature region lower than the temperature of the insert member; an insert molding step of injecting a molten resin in a state that the preheated insert member is positioned in the preheated mold for insert molding; a holding step of holding a molding in the mold; and a cooling step of taking the insert molding out of the mold, and gradually cooling the same to room temperature.

23. (Previously presented) The resin coating method as claimed in claim 21, wherein the insert member is at least one selected from metals, ceramics or their composite members.

24. (Previously presented) The resin coating method as claimed in claim 21, wherein the resin is a thermoplastic resin, and is at least one selected from the group of a homopolymer, a copolymer, a polymer blend, a polymer alloy, and a composite material comprising a polymer as a main component.

25. (Previously presented) The resin coating method as claimed in claim 21, wherein the resin applied to the surface of the insert member has a thickness in a range of from 5 μm to 30 mm.

26. (Previously presented) An insert molding which is a molding obtained by the resin coating method as claimed in claim 21, wherein the molding does not generate resin crack in an air atmosphere of a temperature range of from -40°C to 200°C.

27. (Previously presented) An insert molding which is a molding obtained by the resin coating method as claimed in claim 21, wherein the molding does not generate resin crack or resin peeling in water of a temperature range of from 0°C to 100°C.

28. (Previously presented) A resin coating method of metal gears which is a method of applying a resin to a surface of the metal gears, the method comprising a surface pretreating step of subjecting the metal gears to a silane-coupling treatment after a shot blast treatment; a preheating step of heating the metal gears to a predetermined temperature within a range of from 40°C to a melt injection temperature of the resin and a mold for molding to a predetermined temperature within a range of from 40°C to (melt injection temperature of the resin - 50°C); a molding step of injecting a molten resin in a state that the preheated metal gears are positioned in the preheated mold; a holding step of holding a molding in the mold; and a cooling step of taking the molding out of the mold, and gradually cooling the same to room temperature.

29. (Previously presented) The resin coating method of metal gears as claimed in claim 28, which is a method of applying a resin to a surface of the metal gears, the method comprising a surface pretreating step of subjecting the metal gears to a silane-coupling treatment after a shot blast treatment; a preheating step of heating the metal gears to a predetermined temperature within a range of from 40°C to a melt injection temperature of the resin and a mold for molding to a predetermined temperature within a range of from 40°C to (melt injection temperature of the resin - 50°C) and also to a temperature region lower than the temperature of the insert member; a molding step of injecting a molten resin in a state that the preheated metal gears are positioned in the preheated mold; a holding step of holding a molding in the mold; and a cooling step of taking the molding out of the mold, and gradually cooling the same to room temperature.

30. (Previously presented) The resin coating method of metal gears as claimed in claim 28, wherein the metal gears are a metal gear for transmitting power and/or angle of rotation, or metal splines and serration, for transmitting power.

31. (Previously presented) The resin coating method as claimed in claim 28, wherein the metal gears are at least one selected from steel, iron, copper, aluminum, titanium, or alloys containing those, or their composite members.

32. (Previously presented) The resin coating method as claimed in claim 28, wherein the resin is a thermoplastic resin, and is at least one selected from the group of a homopolymer, a copolymer, a polymer blend, a polymer alloy, and a composite material comprising a polymer as a main component.

33. (Previously presented) The resin coating method as claimed in claim 28, wherein the resin applied to the surface of the insert member has a thickness in a range of from 5 μm to 30 mm, and can be molded in an optional thickness at each site of gear surface.

34. (Previously presented) Resin-coated metal gears which are a molding obtained by the resin coating method as claimed in claim 28, wherein the molding is free from orientation of resin after molding, and has suppressed resin crack and resin peeling.

35. (Previously presented) Resin-coated metal gears comprising two gears constituting a pair of gears that transmit power and/or angle of rotation by contact rotating tooth portions there of, wherein all tooth surfaces of the two gears comprise a molding obtained by the resin coating method as claimed in claim 28, or all tooth surfaces (tooth contact sites) of one gear comprises a molding obtained by the resin coating method as claimed in claim 28, and another gear intermeshing with the one gear is a non-resin-coated metal gear.

36. (Previously presented) Resin-coated metal gears obtained by the resin coating method as claimed in claim 28, wherein when a part of tooth surface is coated with a resin, tooth surface of another gear contacting and intermeshing with non-resin-coated tooth surface of the gear is coated with a resin.

37. (Previously presented) Resin-coated metal gears obtained by the resin coating method as claimed in claim 28, having impact resistance far superior to that of a resin-made gear.

38. (Previously presented) Resin-coated metal gears obtained by the resin coating method as claimed in claim 28, having fatigue resistance far superior to that of a resin-made gear.

39. (Previously presented) Resin-coated metal gears obtained by the resin coating method comprising
a surface of the metal gears, the method comprising a surface pretreating step of subjecting the metal gears to a silane-coupling treatment after a shot blast treatment; a preheating step of heating the metal gears to a predetermined temperature within a range of from 40°C to a melt injection temperature of the resin and a mold for molding to a

predetermined temperature within a range of from 40°C to (melt injection temperature of the resin - 50°C); a molding step of injecting a molten resin in a state that the preheated metal gears are positioned in the preheated mold; a holding step of holding a molding in the mold; and a cooling step of taking the molding out of the mold, and gradually cooling the same to room temperature, having lubricating properties and wear resistance far superior to those of a combination of two metal gears when used under non-lubrication in the combination of gears as claimed in claim 17.

40. (Previously presented) Resin-coated metal gears obtained by the resin coating method comprising

a surface of the metal gears, the method comprising a surface pretreating step of subjecting the metal gears to a silane-coupling treatment after a shot blast treatment; a preheating step of heating the metal gears to a predetermined temperature within a range of from 40°C to a melt injection temperature of the resin and a mold for molding to a predetermined temperature within a range of from 40°C to (melt injection temperature of the resin - 50°C); a molding step of injecting a molten resin in a state that the preheated metal gears are positioned in the preheated mold; a holding step of holding a molding in the mold; and a cooling step of taking the molding out of the mold, and gradually cooling the same to room temperature, having excellent noise reducing properties such that noises due to contact of the gears at the tooth surface thereof is greatly reduced than noises due to contact of metal gears at the tooth surface thereof, in the case of using in the combination of gears as claimed in claim 17.